From:
 Aselda.Thompson@shell.com

 To:
 Vergeront Julie: Morales Javier

 Cc:
 Devan Bagley@shell.com

 Subject:
 RE: Shell Puget Sound Refinery

 Date:
 Tuesday, April 28, 2020 8:11:23 AM

 Attachments:
 2020 04-22 RMP Resubmittal.pdf

Dear Julie and Javier -

I hope you're both doing well. Please see attached RMP Resubmittal that PSR submitted last week.

Many thanks,

Aselda

From: Vergeront, Julie < Vergeront.Julie@epa.gov> Sent: Thursday, February 13, 2020 10:45 AM

To: Thompson, Aselda J SHLOIL-LSPT/EE <Aselda. Thompson@shell.com>; Morales, Javier <Morales. Javier@epa.gov>

Cc: Bagley, Devan D SOPUS-DMW/1 < Devan.Bagley@shell.com>

Subject: RE: Shell Puget Sound Refinery

THINK SECURE. This email has come from an **external source**. Do not click on links or open attachments unless you recognise the sender.

Thanks to both of you for pulling this together.

We will review and let you know if we have any questions.

Regards,

Julie A. Vergeront

Assistant Regional Counsel
EPA Region 10
1200 Sixth Avenue, Suite 155, M/S 11-C07
Seattle, WA 98101
206-553-1497
vergeront.iulie@epa.gov

From: <u>Aselda.Thompson@shell.com</u> <<u>Aselda.Thompson@shell.com</u>>

Sent: Wednesday, February 12, 2020 11:58 AM

To: Vergeront, Julie < Vergeront.Julie@epa.gov>; Morales, Javier < Morales.Javier@epa.gov>

Cc: <u>Devan.Bagley@shell.com</u>

Subject: RE: Shell Puget Sound Refinery

Dear Julie and Javier,

Thanks again for taking the time to meet with us last month – we appreciated the opportunity to provide and receive clarification on the issues raised. Please see attached and below the additional requested information (requests restated in italics). We will update the remaining items as additional information becomes available. [NOTE THAT MULTIPLE EMAILS WILL BE SENT DUE TO THE SIZE OF THE 5 ATTACHMENTS].

Claim 1: The revised language for Shell's Risk Management Plan confirming that Shell considers the flare system to be part of a covered process subject to the requirements of Part 68.

Note that, in addition to referencing the relief systems under MI on page 68 of the Executive Summary, the current RMP from 2015 references flares in Section 7.4.e.5, Prevention Program: Program Level 3 for each covered process, demonstrating that

the flares have been considered and managed appropriately under the current 2015 RMP.

Although Shell considers the current 2015 RMP adequately incorporates the flare system, Shell proposes to include on page 67 of the Executive Summary MI section the addition of the bolded wording below to reflect with more specificity that the flares are covered as relief systems for the process units:

"Mechanical Integrity: Shell Puget Sound Refinery has well-established practices and procedures to maintain pressure vessels, piping systems, relief and vent systems (including the flare), controls, pumps and compressors, and emergency shutdown systems in a safe operating condition. The basic aspects of this program include: (1) conducting training, (2) developing written procedures, (3) performing inspections and tests, (4) addressing findings identified, if any, during inspections and tests, and (5) applying quality assurance measures. In combination, these activities form a system that maintains the mechanical integrity of the process equipment."

Claim 2: The revisions Shell has made or is making to its Alternative Release Scenario to reflect the industrial facilities included within the radius used by Shell to define the zone of impact, and the related revisions to the RMP.

Shell is preparing to submit a revised RMP to the EPA that will update the industrial facilities impacted under the Alternative Release Scenario for flammables to include those mentioned in AV2. In addition, the RMP 5-year revalidation/update to the RMP is being prepared and will be submitted within the allowed timeframe.

Claim 5a: A copy of MEC RP 04.6 Version 1, Underground Piping Inspection Procedures.

Please see attached document "AV5.1 Shell AMS Underground Piping Inspection Recommended Practice.pdf"

Claim 5b: A copy of the corporate-wide procedures for Shell's internal risk-based management inspection scheme that you showed to us at the meeting.

Please see attached documents: "AV5.2 SRBI Procedure.pdf" and "AV5.2 SRBI Tank Procedure.pdf"

Claim 6: A copy of the corporate-wide management of change procedures you showed us at the meeting in response to this claim.

Although Shell maintains that the MOC requirements are not applicable to the decision to use SRBI instead of RBI for its inspection software because that software is not "process chemicals, technology, equipment, [or] procedures," Shell nevertheless undertook an extensive and robust analysis that far exceeds MOC requirements, as demonstrated in the attached documents: "AV6 P&T Development Release Procedure.pdf" and "AV6 Shell Corporate Development Release for Switch to SRBI (MOC).pdf"

Concern 1: The revisions Shell has made or is making to its Offsite Consequence Analysis to reflect the revised estimated residential population and the related revisions to the RMP.

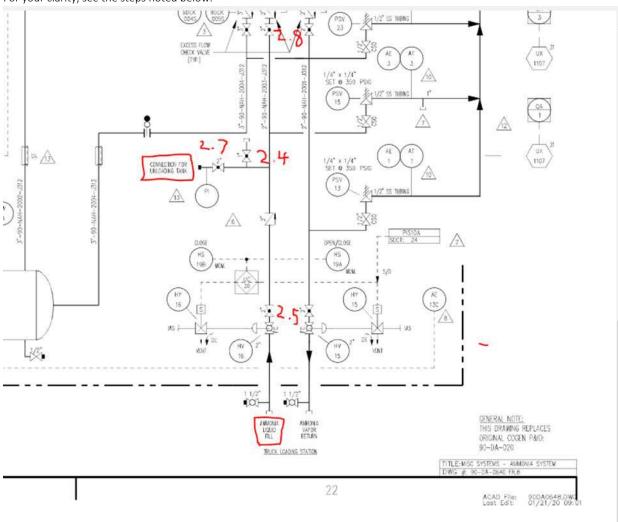
Note that the request to which PSR responded at the enforcement meeting was to provide the basis for the 2015 submittal, which was the DEGADIS information provided. We also stated that we have opted to use a different modeling tool recommended by our contractor (the Phast model) for the upcoming 5-year update/revalidation; that information is not yet ready but will be available for the upcoming submittal.

Concern 3: Unfortunately, neither Javier nor I have good notes regarding why Shell did not make any changes in response to Concerns 3b and 3c. Please either provide a brief written explanation or call me to discuss.

Concern 3(b)- We explained during our meeting that the procedure (Bates labeled PSRRMP0600-0605) is clear as follows: Step 2.7 refers to the "unloading line" which is identified on the P&ID (Bates labeled PSRRMP0620) and the block valve mentioned in step 2.7 is the block valve next to where the operator connected the nitrogen hose in step 2.2. It also states that the operator is "to pressurize the line with nitrogen" in step 2.7, which also makes it clear that they are not opening the valve indicated in step 2.8 used to pressurize the ammonia tank. Step 2.8 mentions a 2" valve on the ammonia fill line, which line is also labeled on the P&ID as a separate line. Step 2.8 indicates the intent of this step is to pressurize the ammonia tank, which further clarifies to the operator which valve should be opened. We also mentioned that the N2 hose connection in incapable of connecting to the ammonia liquid fill line because the connections do not match. So, the only location where the operator

can connect the N2 hose is the "unloading line."

For your clarity, see the steps noted below.



PSRRMP0620

AOC 3(c) - In the meeting, we explained that the 1" vent on the unloading line is distinct from the ammonia fill line (see P&ID above) and that it would be counterproductive to have an explicit step for the operator to verify that this 1" line is closed for the following reasons:

- 1. It is standard site policy to keep all bleeders/vents capped and plugged (two barriers) when not in use. As this 1" vent is not used in unloading, site policy dictates that it will remain closed and plugged.
- 2. As an additional safeguard to ensure that the 1" vent remains closed, if the vent is left open, ammonia would be leaking to the atmosphere and alarms would sound from the ammonia detectors in the area. Thus, the fact that ammonia analyzers are not alarming provides sufficient verification that the 1" vent is closed.

Given these safeguard in place, Shell feels that adding a specific step to verify that the $1^{\prime\prime}$ valve is closed would be

counterproductive; in writing procedures, care must be taken to avoid adding unnecessary steps. Unnecessary steps could lead to operator frustration and a potential that an operator will skip irrelevant steps (human nature). Shell expects each procedure to be followed explicitly, and therefore avoids inadvertently creating an environment that might lead to a desire to skip steps deemed as unnecessary. Therefore, redundant and unnecessary steps should not be included in procedures.

Please let us know if you would like to discuss this information or other issues relating to the matter.

Thanks,

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Email: aselda.thompson@shell.com

From: Vergeront, Julie < Vergeront.Julie@epa.gov>

Sent: Thursday, February 6, 2020 5:51 PM

To: Thompson, Aselda J SHLOIL-LSPT/EE < Aselda. Thompson@shell.com >

Cc: Morales, Javier < <u>Morales.Javier@epa.gov</u>>

Subject: Shell Puget Sound Refinery

THINK SECURE. This email has come from an **external source**. Do not click on links or open attachments unless you recognise the sender.

Aselda,

I am writing up to follow up on our meeting on Tuesday, January 28, 2021 in Seattle, to discuss the allegations in EPA's October 31, 2019 letter. It was a productive discussion.

Javier and I have compared notes from the meeting and request the following information:

Claim 1: The revised language for Shell's Risk Management Plan confirming that Shell considers the flare system to be part of a covered process subject to the requirements of Part 68.

Claim 2: The revisions Shell has made or is making to its Alternative Release Scenario to reflect the industrial facilities included within the radius used by Shell to define the zone of impact, and the related revisions to the RMP.

Claim 5a: A copy of MEC RP 04.6 Version 1, Underground Piping Inspection Procedures.

Claim 5b: A copy of the corporate-wide procedures for Shell's internal risk-based management inspection scheme that you showed to us at the meeting.

Claim 6: A copy of the corporate-wide management of change procedures you showed us at the meeting in response to this claim.

Concern 1: The revisions Shell has made or is making to its Offsite Consequence Analysis to reflect the revised estimated residential population and the related revisions to the RMP.

Concern 3: Unfortunately, neither Javier nor I have good notes regarding why Shell did not make any changes in response to Concerns 3b and 3c. Please either provide a brief written explanation or call me to discuss.

We understand that some of these items may still be in progress, but we would appreciate receiving the information relating to Claims 5a, 5b, and 6, as well as Concern 3—which is already in existence—by Friday, February 15, if additional work is needed on the other items.

Please let me know if you have any questions. I will be out of the office from Friday, February 7 through Wednesday February 12, but will be checking messages occasionally.

Thanks again for you and Devan for a productive discussion.

Regards,

Julie A. Vergeront

Assistant Regional Counsel
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